

World's finest tool, "nepros" with no compromises.

Designed for superior levels of durability, weight balance and usability.



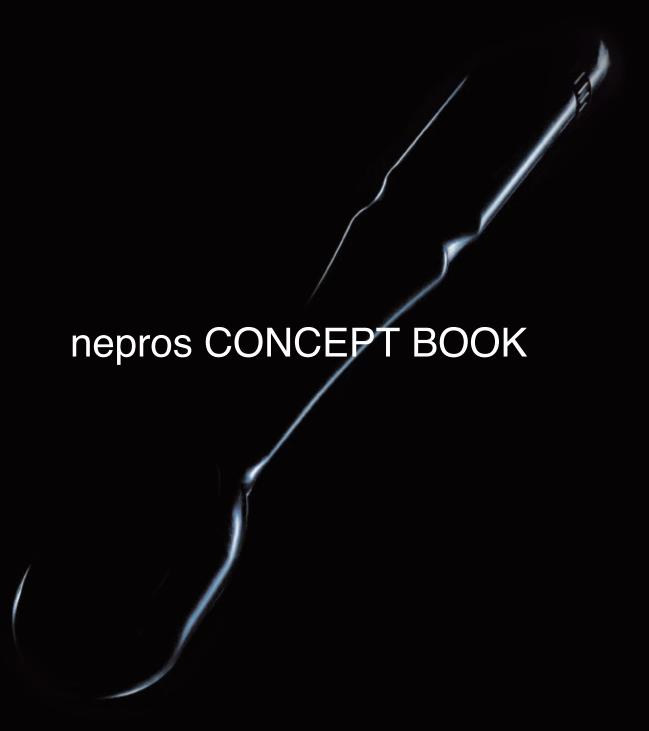
ktc.jp/nepros

*Japanese version only

KTC KYOTO TOOL CO., LTD.

128 Sayama-Shinkaichi, Kumiyama Kuse-gun, Kyoto 613-0034, Japan Contact: contact@kyototool.co.jp Official site: en.ktc.jp

The KTC KTC logo, nepros REGIOS logo, and TRASAS TRASAS logo are registered trademarks of KYOTO TOOL CO., LTD. There might be size differences between those mentioned on this leaflet and the actual products for the product tolerance. Product design might be changed for the improvement without the notifications.





BRAND STORY

NEW PROFESSIONAL SATISFACTION



Created by generations of master craftsmen drawing upon generations of traditional skills and techniques.

Reformation for a new era

As consumer demand shifted from "horsepower and speed" to "safety, environmental friendliness and comfort" in the 1990s, the structure of the automobile also changed. To accommodate this change, KTC decided to create the world's finest tactile tools with new original material and new production methods designed to out-perform existing tool standards.

The Nepros Standard

After receiving direct feedback from over 300 technicians, Nepros was launched in 1995. Uniquely formulated materials with increased strength, toughness, and durability along with new manufacturing techniques allowed Nepros to develop the optimal tool. The traditional ergonomic design was challenged and new human centered designs were reviewed. For example, the grip diameter for the ratchet handles was derived from the horizontal bar used in gymnastics and at playgrounds as this was deemed the most comfortable size for people to use.

Challenge to Stay on Top

Innovation did not stop with the launch of Nepros. Improving tools' durability and usefulness is not only the driving force of Nepros, it is literally its name from – "NEw PROfessional Satisfaction". And the craftsmanship that goes into making every single tool can be seen with its industry proven and stunning chrome finish.



202 New model / NBR390A

Sought the usability by compact head, light gears, and 8steps claw.



2012 Previous model / NBR390

Adopt 90 teeth gear with feeding angle 4°for 3/8" compact head ratchet handles first in the world.



2003 Early "nepros" latter model / NBR3UN

Design reviewed for weight balance optimization. Finger groove on the handle moves to the grip end.



1995 Early "nepros" / NBR3UN

"Mirror nepros" was born with concept "more durable, useful, and beautiful"



1984 "Mirror Tool"

High polished "Mirror Tool" was born with high quality steel and newest production technology.



1982 "Deluxe Tool"

Limited edition ratchet handle only for 3,000 tool sets of "Deluxe Tool set". All tools polished by hand



1



Product introduction

3/8"sq. RATCHET HANDLE

NBR390A



Previous model 30mm

NBR390A 26mm

4mm

Toughness, Capability, Craftsmanship

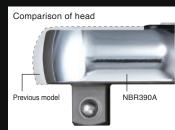
- Once you touch Nepros tools, you will feel the difference
- The world's finest tactile hand tools
- · Continuous improvement



New and Improved Design

Increased accessibility to narrow space

Width of ratchet head was reduced to provide greater access to smaller spaces without sacrificing strength and durability



Shaped up ratchet head size.

Streamlined shape provides even more comfort.

Streamlining the shape between the ratchet head and handle creates a more comfortable tool



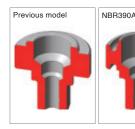


Lighter and more comfortable handle reduces hand stress

Previous model 2 7 5 g NBR390A 245g

Compact and light with 90 gears

By streamlining the changer and switch, the ratchet is more compact, lighter weight and stronger.

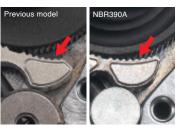


New and Improved Functionality

Inner stress dispersed by round-machining.

8 step paw for increased strength

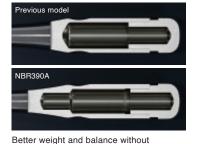
By increasing the claw from 7 steps to 8 steps, the force of the tool is spread out more increasing the strength.



New 8 step claw increases strength

Increased Balance and Lighter Weight

Proprietary design technology allowed for additional hollowing of the handle resulting in a lighter weight tool with better balance while increasing durability.



sacrificing strength and durability



10% lighter Switch is combined with lever

Small, thin, and compact form

socket

Compact design

The compact tool has a shorter height and smaller external diameter made possible by an ideal design, tough materials, advanced processing technology, and optimal heat processing.

Beautiful surface

Hard chrome plating for anti-wear, anti-corrosion, and

Rubber ring preventing slippage The rubber ring greatly improves workability during hand-cranking

Clear engraving

The beautifully-refined engravings are easy to see and increase the efficiency of work.

Unique design for fitting with other drive tools

Uses a larger ball in drive tools. Optimized socket ball groove prevents backlash and achieves superior

N-PowerFit shape

N-PowerFit shape distributes stress through a gentle arc in the bore by enlarging the contact surface. Ideal contact prevents damage to bolts and nuts and increases the strength of the socket. This shape contributes to compact size of the socket too.





Original dimensional standard

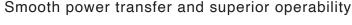
KTC's original dimensional standard reduces the fit gap with bolts and nuts to the absolute minimum, creating a superior fit feeling.





*Japanese version only

UNIVERSAL JOINT



Extra smoothness:Grand Cross mechanism Universal joint has two rotating axes which are out of alignment in a vertical direction. Consequently, movement becomes jittery as the angle becomes greater. The nepros solution: comfortable work does not bend past an angle where it is possible to rotate and transmit torque.

unlike usual versions









together with achieving a thinner body.

Strength was increased by shifting the drive angle by 45°

are shifted by 45°.

Smooth access with firm holding

The nepros universal joint with spring force provides smooth access to bolts. Universal joint with socket will shake if holding force is not sufficient, and accessing bolt gets difficult.



The nepros universal joint NBJ3 does not shake and provides firm hold even with a 24 mm socket NB3-24 (weight: 90 g).

EXTENSION BAR

Magnificent form for excellent torque transfer



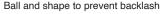


Elegant form for superior torque transfer

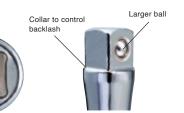
Elegant form was created by stress analysis. This form prevents twisting stress from being focusing on one particular point. This achieves excellent torque transfer and smooth feeling during use.

Inserting angle uses N-PowerFit shape which transfers force at the surface

Product strength was improved by N-PowerFit for the insertion angle. N-PowerFit distributes stress by expanding the contact surface.



A larger ball is used to improve fit with the socket. Installing a collar on the fitting area decreases backlash



Straight hold mechanism's other use

The nepros wobble extension bar has a flexible joint area and can be used as a swing head extension bar. Using the straight hold mechanism makes it possible to hold the socket straight by inserting the



Straight hold

QUICK SPINNER



Perfect grip design for rapid turning

Rubber ring for increased workability

Together with rapid rotation and resistance to slippage, the rubber ring significantly increases workability at the time of pullout.

Uses N-PowerFit shape

No rattling

With a larger ball and unique settings for the ball groove, the spinner enables stable work without any shaking during usage

Compact design

Thickness is reduced to realize a compact design.

T-SHAPED WRENCH

Fast and comfortable

The nepros ratchet handles' excellent external diameter allows rapid rotation by grabbing & rotating with fingertips. Insertion angles: 1/4"sq. (Normal type), 3/8"sq. (Normal/Compact), 1/2"sq. (Normal).



KTC QUICK SPINNER RATCHET HANDLE



Clear engraving

Size is displayed in large engraving on the

handle top and in the socket hole. The

Handle/Body press-fit portion is processed

into a hexagonal shape for T-shape

wrenches/a square shape for T-shape

handles. This makes recognition easy.

RACHET HANDLE

NHT-08_14





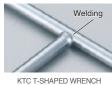
Ultimate T-shaped handle for outstanding balance and operability

Rubber rings for increased grip strength

Increasing grip strength by preventing slippage during work, the rubber rings attached to each end of the handle serve as contact surfaces for protection when the handle is placed on the floor.

Precise and accurate press-fit processing

The joint between the handle and shaft uses accurate press-fit processing. Precise processing technology is required in order to open a hole in the center of the handle and press-fit the shaft. This process produces the handle and shaft at a 90° angle and makes rotation extremely smooth. Unlike welding, no protuberances are formed on





nepros T-SHAPED WRENCH



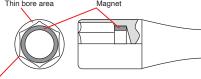
with a thin design improves workability. A magnet creates

holding bolts/nuts and access to recessed spaces

Unique form for fast-rotation performance Handle top & bottom are shaved down into equal weight.

During rapid rotation, this design creates inertia which produces smooth rotation. Moreover, the handle length is different for each size.

Tools with ultimate length for rapid rotation exert required torque on bolts and nuts of all sizes.

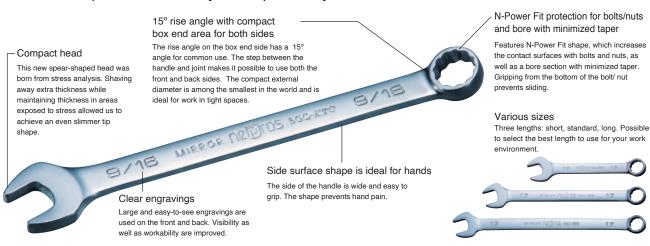


Form to improve workability and operability

COMBINATION WRENCH



Form to improve workability and operability



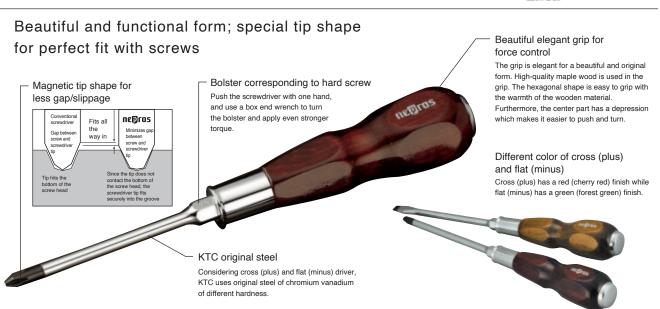
ADJUSTABLE WRENCH





WOODEN GRIP SCREWDRIVER







Bore area/N-Power Fit shape prevent Side surface shape: ideal size for hands and easy to put in force damage to bolts/nuts The N-Power Fit shape increases the Handle is wide and easy to grip.

contact surface with bolts and nuts. The bore area minimizes taper to ensure contact of the bolt bottom with the nut



The nepros half-moon wrenches have a unique asymmetrical design with different radius from left/right sides. The different radius enlarges the range of use and provides support for a variety of situations. Combination with a same-sized S-shape box end wrench with a different radius

satisfies various

nenros HALE MOON WRENCH NMH2-1012

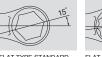
nepros HALE MOO NMH2-1214

▲ S-SHAPED BOX END WRENCH

Improving workability: Adding an angle to box end wrench

KTC added a 15° angle to the bore of the straight standard hexagonal box end wrench and a 7°30' angle to the straight standard box end wrench. Using both the front and back of the tools enables work in a range of 30° for the hexagonal type and 15° for the dodecagon type.

*The dodecagon type fixed at an angle of 7°30' is only available for the straight standard box end wrench



FLAT TYPE STANDARD HEX BOX END WRENCH

FLAT TYPE STANDARD

▲ FLAT TYPE STANDARD HEX BOX END WRENCH ▲ FLAT TYPE STANDARD BOX END WRENCH

Thickness controlled according to direction of work

A thin design is used for the straight type, which is often used to access in vertical directions. On the other hand, a smaller external diameter is used for the normal box end wrench, which is often used to access in a horizontal direction. This realizes excellent design for



▲ FLAT TYPE SHORT BOX WRENCH ▲ 45°×6°SHORT OFFSET WRENCH

Clear engravings

Clear engravings are used on the front and back. Visibility is enhanced and workability is improved.

▲ FLAT TYPE STANDARD BOX END WRENCH

Rise angles of 45° and 6°

Rise angles of 45° and 6° are used to bring the center of the bolt closer to an imaginary line extending straight from the handle. This design reduces stripping and transfers torque

Ultimate torque transfer and workability

Torque transference is further improved by special design with the center of the bolt closer to an imaginary line extending straight from the handle. The protruding shape on one side enables usage even when there is spot facing around the bolt or nut. The rise angle is designed to start straight and then reach 15° ideal for tiny spaces.



▲ FLAT TYPE EXTRA-LONG BOX END WERNCH

Length and protruding bore area for excellent workability This wrench is 1.5 times longer than standard wrenches and has a bore area which protrudes largely to one side. This ensures secure fit with offset bolts.

thus increasing the range of work.

▲ 15°OFFSET WRENCH